ABSTRACT OF THE DISCLOSURE

The present invention describes a method and apparatus for resolving anomalies within a network topology map that typically occur when a derived topology map fails, for a variety of reasons, to include devices resident on the network. The method of the present

5   invention discovers missing devices by identifying a conflicting link within a received topology map, the conflicting link comprising a source and one or more conflicting destinations. The conflicting link is resolved through the use of one or more virtual devices within the topology map. The conflicting link is replaced with a link to a virtual device based upon the resolution of the conflicting link, thereby eliminating the anomaly in the topology map. The step of resolving

10   the conflicting link may also comprise the steps of determining a number of conflicting destinations from the source of the conflicting link, resolving the source of the conflicting link, and resolving the conflicting destination. In order to reduce the number of virtual devices inserted to the topology, the method may further include identifying a link between two virtual devices and merging the virtual devices.

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